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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,709	04/19/2004	Kai-Chung Tseng	OR0409AA	5371

7590

09/16/2004

LAW OFFICE OF LIAUH & ASSOCIATES
SUITE 5-388
4224 WAIALAE AVENUE
HONOLULU, HI 96816-5307

EXAMINER

MULLER, BRYAN R

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/828,709	TSENG, KAI-CHUNG <i>CK</i>	
	Examiner	Art Unit	
	Bryan R Muller	3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-6 and 9 is/are allowed.
- 6) ☒ Claim(s) 1-3, 7 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsieh ('036) in view of Evans ('829).

3. Hsieh discloses a screw with a head consisting of a four-sided actuation block projected from a top of the connecting section, the actuation block including two curved bearing surfaces having different curvatures; wherein the actuation block is operable to be held by an open end of the wrench with two opposite interior surfaces of the open end of the wrench being in contact with two points of the bearing surfaces so that turning the wrench will fasten or unfasten an object coupled to the cavity. As stated, Hsieh only provides the head that can be engaged by several different sized open-ended wrenches but does not provide this head on a socket attachment. Evans discloses multiple embodiments of wrench and ratchet adapters that combine uses of sockets, open-ended wrenches and socket wrenches, one of which is a two sided socket, each side with a different sized socket, that is meant to be engaged by an open-ended wrench and another is an adapter to drive a standard square socket attachment with an open-ended wrench. Evans also sites the advantage of providing such adapters would allow for mechanical workers to use the same tool for several applications (Col 1,

lines 44-48) and that this application of adapters would be more convenient and less expensive to workers because it would limit the amount of tools they will need to own or transport. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the screw of Hsieh with a socket which would allow for several different sized wrenches to drive a particular socket minimizing the need for wrenches of different sizes as taught by Evans. Another obvious modification would have been to apply the embodiment shown in Evan's fig.1 to Hsieh's screw and replace the screw with a protrusion having a section of predetermined shape (in this case the predetermined shape is a square, making the protrusion a typical socket wrench drive) with the intent to fit into a lower connecting section including a bottom cavity and a top cavity having a section of the same predetermined shape. This would allow for one of any number of different sized open-ended wrenches to be used to drive any number of sockets made to receive a standard socket drive or any other predetermined shape that may be applied thereby limiting the number of wrenches or socket drivers that would be needed.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hsieh and Evans ('829) as applied to claim 1 above, and further in view of Evans ('873).

5. Hsieh and Evans ('829) disclose the socket as discussed supra but fail to include a slip resistant surface on the curved bearing surfaces of the socket. Evans ('873) teaches the need to supply a wrench with a non-slip arrangement for applying increased torque to a hexagonal member that is "rounded off" (Col. 1, lines 50-55) and shows an

open-ended wrench used to engage the members. A hexagon with any two opposing corners "rounded off" would exactly fit the description of the 4-sided actuating block with two curved bearing surfaces that is disclosed by Hsieh. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the curved bearing surfaces on the socket of Hsieh and Evans ('829) with a non-slip surface as taught by Evans ('873) in order to apply increased torque with an open-ended socket wrench.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hsieh and Evans ('829) as applied to claim 1 above, and further in view of the applicant's admitted prior art.

7. Hsieh and Evans ('829) disclose the socket as discussed supra and Hsieh provides the actuating block with, "a tool slot in the upper surface of the head adapted for turning by a screw driver, grooved wrench, hex wrench, or socket wrench" (Col. 1, lines 13-15) but fail to disclose the particular shape of the tool slot. The applicant discloses a conventional socket comprises an upper coupling with a cavity having a section of a square adapted to couple to a protrusion on the bottom of a wrench. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to supply the socket of Hsieh and Evans ('829) with a tool slot with a square cross section to allow for the socket to be engaged by a conventional socket wrench, thus further limiting the amount of necessary tools to drive several different sockets.

Allowable Subject Matter

8. Claims 4, 5 and 6 allowed. The following is an examiner's statement of reasons for allowance: The art of record (considered as a whole) neither anticipates nor renders obvious a four sided actuating block including two bearing surfaces being not parallel with respect to each other, together in combination with the rest of the claimed limitations set forth in the independent claim.

9. Claim 9 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Garver ('786) and Geuel ('053) both disclose inventions relating to socket drives or socket driven fasteners and disclose the importance of slip resistant interaction between wrench and driven member and Cooper (GB'534) discloses a socket made to be engaged by a socket driver or an open-ended wrench.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan R Muller whose telephone number is (703) 305-0487. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J Hail III can be reached on (703) 308-2687. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

BRM *BRM*
08/26/2004



Joseph J. Hail, III
Supervisory Patent Examiner
Technology Center 3700